

REMARKS

In the Office Action, the Examiner kindly pointed out that the Computer Readable Form ("CRF") of record is formatted improperly. Accordingly, enclosed is a corrected CRF which is believed to address the deficiencies noted in the Office Action. Of course, the data found within the corrected CRF is identical to that which was filed originally.

Additionally, Applicants have amended their specification by directing the entry of the attached paper copy of the corrected Sequence Listing. In conformity with 37 C.F.R. §1.825(a), support for the amendment is found in the specification as filed and the amendment includes no new matter. Finally, in conformity with 37 C.F.R. §1.825(b), the copy of the Sequence Listing in the corrected CRF is the same as the attached Paper Copy.

Although no charges should be necessary in connection with this paper, any required fees may be charged to Deposit Account No. 06-1205.

Applicants' undersigned attorney may be reached
in our New York office by telephone at (212) 218-2100. All
correspondence should continue to be directed to our below
listed address.

Respectfully submitted,



Attorney for Applicants
Lawrence S. Perry
Registration No. 31,865

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(1) GENERAL INFORMATION

(i) APPLICANT: Koizumi, Satoshi
(i) APPLICANT: Sasaki, Katsutoshi
(i) APPLICANT: Endo, Tetsuo
(i) APPLICANT: Tabata, Kazuhiko
(i) APPLICANT: Ozaki, Akio
(ii) TITLE OF INVENTION: Processes for Producing Sugar Nucleotides and Complex Carbohydrates

(iv) CORRESPONDENCE ADDRESS:

(A) ADDRESSEE: Fitzpatrick, Cella, Harper & Scinto
(B) STREET: 30 Rockefeller Plaza
(C) CITY: New York
(D) STATE: New York
(E) COUNTRY: USA
(F) ZIP: 10112-3801

(v) COMPUTER READABLE FORM:

(A) MEDIUM TYPE: Diskette, 3.50 inch, 1.4Mb storage
(B) COMPUTER: pc
(C) OPERATING SYSTEM: MS-DOS
(D) SOFTWARE:

(vi) CURRENT APPLICATION DATA:

(A) APPLICATION NUMBER: 09/068,528
(B) FILING DATE: 13-MAY-1998
(C) CLASSIFICATION: 536/

(viii) ATTORNEY/AGENT INFORMATION:

(A) NAME: Perry, Lawrence S.
(B) REGISTRATION NUMBER: 31865
(C) REFERENCE/DOCKET NUMBER: 766.20

(ix) TELECOMMUNICATION INFORMATION:

(A) TELEPHONE: (212) 218-2100
(B) TELEFAX: (212) 218-2200

(2) INFORMATION FOR SEQ ID NO:1:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 31 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: synthetic DNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1:

GGAGAAAGCT TATGGCTGCC ATTAATACGA A

31

(2) INFORMATION FOR SEQ ID NO:2:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 30 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single

(D)TOPOLOGY: linear
(ii)MOLECULE TYPE: synthetic DNA
(xi)SEQUENCE DESCRIPTION: SEQ ID NO:2:
AACACGGATC CGGATGTTAC TTCTTAATGC

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(2)INFORMATION FOR SEQ ID NO:3:
(i)SEQUENCE CHARACTERISTICS:
(A)LENGTH: 28 base pairs
(B)TYPE: nucleic acid
(C)STRANDEDNESS: single
(D)TOPOLOGY: linear
(ii)MOLECULE TYPE: synthetic DNA
(xi)SEQUENCE DESCRIPTION: SEQ ID NO:3:
ATGGAGGATC CTGCTCTGTA TACCGTCT

28

(2)INFORMATION FOR SEQ ID NO:4:
(i)SEQUENCE CHARACTERISTICS:
(A)LENGTH: 20 base pairs
(B)TYPE: nucleic acid
(C)STRANDEDNESS: single
(D)TOPOLOGY: linear
(ii)MOLECULE TYPE: synthetic DNA
(xi)SEQUENCE DESCRIPTION: SEQ ID NO:4:
TGCTGGTCGA CCTGCGTTG

20

(2)INFORMATION FOR SEQ ID NO:5:
(i)SEQUENCE CHARACTERISTICS:
(A)LENGTH: 31 base pairs
(B)TYPE: nucleic acid
(C)STRANDEDNESS: single
(D)TOPOLOGY: linear
(ii)MOLECULE TYPE: synthetic DNA
(xi)SEQUENCE DESCRIPTION: SEQ ID NO:5:
AAGGAAAGCT TATGACGCAA TTTAATCCCG T

31

(2)INFORMATION FOR SEQ ID NO:6:
(i)SEQUENCE CHARACTERISTICS:
(A)LENGTH: 20 base pairs
(B)TYPE: nucleic acid
(C)STRANDEDNESS: single
(D)TOPOLOGY: linear
(ii)MOLECULE TYPE: synthetic DNA
(xi)SEQUENCE DESCRIPTION: SEQ ID NO:6:
GCAAAGTTAA CAGTCGGTAC

20

(2)INFORMATION FOR SEQ ID NO:7:
(i)SEQUENCE CHARACTERISTICS:
(A)LENGTH: 31 base pairs

(B)TYPE: nucleic acid
(C)STRANDEDNESS: single
(D)TOPOLOGY: linear
(ii)MOLECULE TYPE: synthetic DNA
(xi)SEQUENCE DESCRIPTION: SEQ ID NO:7:
TCAGGAAGCT TATGTTGAAT AATGCTATGA G

31

(2) INFORMATION FOR SEQ ID NO:8:
(i)SEQUENCE CHARACTERISTICS:
(A)LENGTH: 27 base pairs
(B)TYPE: nucleic acid
(C)STRANDEDNESS: single
(D)TOPOLOGY: linear
(ii)MOLECULE TYPE: synthetic DNA
(xi)SEQUENCE DESCRIPTION: SEQ ID NO:8:
TCTCCGGATC CCATGTGACC GGGTTAG

27

(2) INFORMATION FOR SEQ ID NO:9:
(i)SEQUENCE CHARACTERISTICS:
(A)LENGTH: 28 base pairs
(B)TYPE: nucleic acid
(C)STRANDEDNESS: single
(D)TOPOLOGY: linear
(ii)MOLECULE TYPE: synthetic DNA
(xi)SEQUENCE DESCRIPTION: SEQ ID NO:9:
TCTAAATCGA TGCAGACAAA GGACAAAG

28

(2) INFORMATION FOR SEQ ID NO:10:
(i)SEQUENCE CHARACTERISTICS:
(A)LENGTH: 27 base pairs
(B)TYPE: nucleic acid
(C)STRANDEDNESS: single
(D)TOPOLOGY: linear
(ii)MOLECULE TYPE: synthetic DNA
(xi)SEQUENCE DESCRIPTION: SEQ ID NO:10:
TTGCAGGATC CTCGTAGGCC TGATAAG

27

(2) INFORMATION FOR SEQ ID NO:11:
(i)SEQUENCE CHARACTERISTICS:
(A)LENGTH: 20 base pairs
(B)TYPE: nucleic acid
(C)STRANDEDNESS: single
(D)TOPOLOGY: linear
(ii)MOLECULE TYPE: synthetic DNA
(xi)SEQUENCE DESCRIPTION: SEQ ID NO:11:
TGATATCCGC TCCCTTCCG

20

(2) INFORMATION FOR SEQ ID NO:12:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 26 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: synthetic DNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:12:
ACAGCGGATC CGATGTGTT GCTGAG

26

(2) INFORMATION FOR SEQ ID NO:13:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 29 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: synthetic DNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:13:
ACAGCAAGCT TTTGACTTTA GCGGAGCAG

29

(2) INFORMATION FOR SEQ ID NO:14:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 29 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: synthetic DNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:14:
GAGTTGGATC CCGATATAAA AGGAAGGAT

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(2) INFORMATION FOR SEQ ID NO:15:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 25 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: synthetic DNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:15:
TTTTTAAGCT TCATTATCA AGAGT

25

(2) INFORMATION FOR SEQ ID NO:16:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 31 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: synthetic DNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:16:
TTTTTGATAT CCCCAATGCT GGGGGTTTT G

31

(2) INFORMATION FOR SEQ ID NO:17:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 31 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: synthetic DNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:17:

CGTCAAAGCT TAAATGATAT TCGGGGATAA T

31

(2) INFORMATION FOR SEQ ID NO:18:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 25 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: synthetic DNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:18:

AGGGAGGATC CGACATTACT CGTTC

25

(2) INFORMATION FOR SEQ ID NO:19:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 33 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: synthetic DNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:19:

CCGCAAGATC TCGTAAAAAG GGTATCGATA AGC

33

(2) INFORMATION FOR SEQ ID NO:20:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 27 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: synthetic DNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:20:

TTGGGAAGCT TCCGGCAAAT GTGGTTT

27

(2) INFORMATION FOR SEQ ID NO:21:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 25 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: synthetic DNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:21:
ATAAACTCGA GAGAGACAAG CGGAG

25

(2) INFORMATION FOR SEQ ID NO:22:
(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 27 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: synthetic DNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:22:
TATTATCGAT GAATTAATAA TTCATAG

27

(2) INFORMATION FOR SEQ ID NO:23:
(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 25 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: synthetic DNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:23
CTCTGGATCC AGTTACGTAT AATAT

25

(2) INFORMATION FOR SEQ ID NO:24:
(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 30 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: synthetic DNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:24:
CGGCAAGCTT ATTGTGCCTT TCCAATAAAA

30

(2) INFORMATION FOR SEQ ID NO:25:
(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 28 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: synthetic DNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:25:
ACTTGGATCC CCGTCAATAA ATCTTGCG

28

(2) INFORMATION FOR SEQ ID NO:26:
(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 30 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single

(D) TOPOLOGY: linear
(ii) MOLECULE TYPE: synthetic DNA
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:26:
GGTAAAGCTT ATGCAAAACC ACGTTATCAG

30

(2) INFORMATION FOR SEQ ID NO:27:
(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 29 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear
(ii) MOLECULE TYPE: synthetic DNA
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:27:
AACCGGATCC TTATTGGAAA GGCACAATA

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